Amendments To The Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently Amended) A rapid-action coupling cylinder comprising:

a guiding device which controls insertion of a pull-in nipple (2) fixed to the underside of a workpiece pallet (19) into a central receiving aperture in a housing (11) of the rapid-action coupling cylinder (1),

wherein a front face on a free end of the pull-in nipple (2) has, in the direction of insertion, and a conical bevel (17) that is beveled toward the rear, which cooperates with an associated and oppositely beveled conical receptacle (18) in the housing (11);

wherein an inner beveled circumference of the receiving aperture (4) on a cover of the housing (11) has an inlet radius (102) that engages the conical bevel (17) and guides the pull-in nipple (2) into the conical receptacle (18), and

wherein the conical receptacle (18) is formed by a upper ball bearing cup (8) and a lower spring support (9).

Claims 2-4 (Canceled)

- 5. (Previously Presented) A rapid-action coupling cylinder according to claim 1, wherein the conical receptacle (18) disposed in the housing (11) is fixed to the housing.
- 6. (Currently Amended) A rapid-action coupling cylinder according to claim
 4. A rapid-action coupling cylinder comprising:

Appln. No. 10/553,318

Amdt. dated November 18, 2008

Reply to Office Action of July 18, 2008

a guiding device which controls insertion of a pull-in nipple (2) fixed to the underside of a workpiece pallet (19) into a central receiving aperture in a housing (11) of the rapid-action coupling cylinder (1), wherein a free end of the pull-in nipple (2) has a recessed conical receptacle (33) that engages an associated and oppositely beveled conical tip (34) in the housing (11), wherein the oppositely beveled tip (34) disposed in the housing is fixed on a lifting piston that is arranged raisable and lowerable in the housing.

- 7. (Previously Presented) A rapid-action coupling cylinder according to claim 6, in a region where the pull-in nipple (2) and the lifting piston make contact, the corresponding contacting and associated surfaces are kept free from contaminations.
- 8. (Currently Amended) A rapid-action coupling cylinder according to claim 7, wherein the lifting piston has provided in it-blowing-air openings or cooling agent openings that are directed towards associated surfaces of the pull-in nipple (2).
- 9. (Previously Presented) A rapid-action coupling cylinder according to claim 6, wherein the lifting piston (21) is composed of several parts and that an upper part thereof consists of an exchangeable wear insert (28).
- 10. (Previously Presented) A rapid-action coupling cylinder according to claim 6, wherein disposed in the lifting piston is a turbine wheel (36) that is driven in rotation.
- 11. (Previously Presented) A rapid-action coupling cylinder according to claim 6, wherein in a region of the conical tip of the lifting piston, an annular projection (35)

Appln. No. 10/553,318

Amdt. dated November 18, 2008

Reply to Office Action of July 18, 2008

with nose-shaped cross section is provided that chops shavings that enter into the intermediate space between the pull-in nipple (2) and lifting piston (31).

12. (Currently Amended) A rapid-action coupling cylinder according to any of claims 1 through 11 claim 1, wherein an air-carrying space is formed on an underside of the workpiece pallet (19).

13. (Currently Amended) A rapid-action coupling cylinder according to claim 1-or-4, wherein a sealing-air monitoring is provided for monitoring a flat and level seat of the workpiece pallet (19) on a top surface of the cover (6).

Claims 14-15. (Canceled)

16. (Previously Presented) A rapid-action coupling cylinder according to claim 6, wherein between the pull-in nipple (2) and the lifting piston (21, 31, 61, 71) disposed in the interior of the rapid-action coupling cylinder, a capturing device (50, 53, 54, 56) is arranged which mechanically connects the pull-in nipple to the lifting piston.

17. (Currently Amended) A rapid-action coupling cylinder according to claim 1-or-4, wherein multiple pull-in nipples that are arranged parallel with each other on the underside of the workpiece pallet, wherein a capturing device is assigned to each pull-in nipple in a separate rapid-action coupling cylinder, wherein all capturing devices are driven synchronously.

18. (Previously Presented) A rapid-action coupling cylinder according to claim 17, wherein the lifting pistons (71) that are connected to the capturing device in each

Appln. No. 10/553,318 Amdt. dated November 18, 2008 Reply to Office Action of July 18, 2008

case are mechanically connected to each other by means of a toggle-lever rod assembly (70, 72, 81, 82).

Claims 19-22. (Canceled)

23. (Currently Amended) A rapid-action coupling cylinder according to elaim 4 claim 6, wherein the recessed conical receptacle (33) disposed in the housing (11) is fixed to the housing.

24. (New) A rapid-action coupling cylinder according to claim 6, wherein a sealing-air monitoring is provided for monitoring a flat and level seat of the workpiece pallet (19) on a top surface of the cover (6).